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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,781	03/18/2004	Ernest Geskin	P/1824-17	8057

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EXAMINER
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HOGAN, JAMES SEAN

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/803,781	Applicant(s) GESKIN ET AL.	
	Examiner James S. Hogan	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,6,9-11 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,11 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claims 1, 4, 11 and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,756 to Lawrence Jr., in view of U.S. Patent Application 2003/0192955 A1 to Geskin et al.

Regarding claim 1, Lawrence Jr. ('756) teaches (see Figure 5) a nozzle having a housing (24) and assembled including two conjugated parts (64a and 64b), the parts forming a nozzle outlet (66). Lawrence Jr. ('756) does not teach the conjugated parts being separated by a spacer seal, nor are the conjugated parts taught specifically to deform. Geskin et al. teaches a nozzle with a method of sealing between two nozzle conjugated parts where a spacer seal (insertion 3) separates conjugated parts of a nozzle, and wherein the spacer seal is deformable so as to define a geometry of the nozzle outlet (see Abstract, line 6-7) and seals surfaces between nozzle parts and subsequently between the parts and a housing. Further, Geskin et al. ('955), teaches the deformation of nozzle parts and the spacer seal as necessary in forming a nozzle orifice (page 2, paragraph 31). As per claim 4, the housing of Lawrence Jr. ('756) is circular, the parts (64a and 64b) are semi-circular, and the spacer seal of Geskin et al. ('955) is rectangular (Figure 4 as being representative of the rectangular spacer seal). It would have been obvious to one having skill in the art at the time the invention was made to have

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substituted in the nozzle assembly of Lawrence Jr. ('756) for the nozzle assembly teachings and sealing methods of Geskin et al. ('955) in order to prolong the usefulness of a high-pressure nozzle assembly comprising a conjugated nozzle orifice.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,756 to Lawrence Jr. in view of U.S. Patent Application 2003/0192955 A1 to Geskin et al. and further in view of U.S. Patent Application 2004/0155125 A1 to Kramer et al.

The rejection of claim 1 above serves as the basis for the following. It should be noted that Lawrence Jr. ('756) as modified by Geskin et al. ('955) does not teach a nozzle orifice having a shape different than that of a rectangle. Regarding claims 15-17, while Kramer does not specifically teach nozzle outlets as having a zigzag shape (claim 15) or being discontinuous (claim 16) or formed by openings on alternate opposite sides of a center line (claim 17), Kramer et al. does teach (figures 5-18) a plurality of nozzle outlet shapes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the nozzle outlet shape of the conjugated parts in a nozzle assembly as taught by Geskin et al. ('955) and Lawrence Jr. ('756) with desired possible outlet shapes as taught by Kramer et al. in order to affect a spray pattern in a nozzle so as to direct a flow of liquid in a specific pattern.

Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,447,756 to Lawrence Jr., in view of U.S. Patent Application 2003/0192955 A1 to Geskin et al. and further in view of U.S. Patent No. 4,429,339 to Kreitsberg.

Regarding claim 11, Lawrence Jr. ('756) teaches (see Figure 5) a nozzle having a housing (24) and assembled including two conjugated parts (64a and 64b), the parts forming a nozzle outlet (66). Lawrence Jr. ('756) does not teach the conjugated parts being separated by a spacer seal, nor are the conjugated parts taught specifically to deform. Geskin et al. teaches a nozzle with a method of sealing between two nozzle conjugated parts where a spacer

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seal (insertion 3) separates conjugated parts of a nozzle, and wherein the spacer seal is deformable so as to define a geometry of the nozzle outlet (see Abstract, line 6-7) and seals surfaces between nozzle parts and subsequently between the parts and a housing. Further, Geskin et al. ('955), teaches the deformation of nozzle parts and the spacer seal as necessary in forming a nozzle orifice (page 2, paragraph 31). Neither Lawrence Jr. nor Geskin teach the housing having a rectangular internal cross-section. Kreitsberg teaches a nozzle assembly (See Figure 3) that features a housing (34) that accepts an insert (disc member 36) where the housing has a substantially rectangular cross-section (at 38). Kreitsberg is silent on the exact angle of the housing's features, however, graphically, Kreitsberg teaches one having ordinary skill a substantially tubular housing retaining a nozzle insert. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the nozzle housing in a nozzle assembly as taught above by Geskin et al. ('955) and Lawrence Jr. ('756) with a rectangular cross-section in order to provide a nozzle housing that can be manufactured in a less expensive manner by straight drilling rather than incremental degree frustoconical milling.

#### ***Allowable Subject Matter***

Claims 6, 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSH  
05/02/2006



**David A. Scherbel**  
Supervisory Patent Examiner  
Group 3700